

Claims

1. A value document, in particular bank note, having a value document substrate and at least two different feature substances for checking the value document, characterized in that first and second feature substances form mutually independent codings, the second feature substance being applied to the value document substrate, and the first feature substance being applied to the value document substrate or incorporated into the volume of the substrate.
2. The value document according to claim 1, characterized in that a third feature substance is incorporated into the volume of the substrate of the value document.
3. The value document according to claim 2, characterized in that the third feature substance is distributed substantially uniformly within the volume of the value document substrate.
4. The value document according to at least one of claims 1 to 3, characterized in that at least one of the feature substances is formed by a luminescent substance or a mixture of luminescent substances.
5. The value document according to at least one of claims 1 to 4, characterized in that at least one of the feature substances is formed on the basis of a host lattice doped with rare earth elements.
6. The value document according to at least one of claims 1 to 5, characterized in that at least one coding extends over a predominant part of a surface of the value document, in particular over the substantially total surface of the value document.
7. The value document according to at least one of claims 1 to 6, characterized in that at least one coding is a bar code.
8. The value document according to at least one of claims 1 to 7, characterized in that at least one coding lies in the material properties, in particular in the form of the emission and/or excitation spectra, of the first and/or second feature substance.

9. The value document according to at least one of claims 1 to 8, characterized in that at least one coding represents information about the value document, the information being present in encrypted or unencrypted form.
10. The value document according to at least one of claims 1 to 9, characterized in that the codings formed by the first and second marking substances are applied at different places of the value document and/or with different shapes.
11. The value document according to at least one of claims 1 to 10, characterized in that the codings formed by the first and second marking substances represent different information contents.
12. The value document according to at least one of claims 1 to 11, characterized in that the value document substrate comprises a printed or unprinted cotton fiber paper.
13. The value document according to at least one of claims 1 to 12, characterized in that the value document substrate comprises a printed or unprinted plastic film.
14. The value document according to at least one of the claims 1 to 13, characterized in that the first and/or second feature substance is printed on the value document substrate.
15. The value document according to at least one of claims 1 to 14, characterized in that the first and/or second feature substance is applied to the moist paper web, in particular sprayed on, in the form of the coding during papermaking.
16. The value document according to at least one of claims 1 to 15, characterized in that the first feature substance is present within the volume of the value document substrate or near the surface in the substrate.
17. The value document according to at least one of claims 1 to 16, characterized in that the first and/or second feature substance is colorless or has only little inherent color in the visible spectral range.

18. A method for producing a value document according to one of claims 1 to 17, characterized in that the first and second feature substances form mutually independent codings, the second feature substance being applied to the value document substrate, and the first feature substance being applied to the value document substrate or incorporated into the volume of the substrate.
19. The production method according to claim 18, characterized in that the first and/or second feature substance is printed on the value document substrate.
20. The production method according to claim 18, wherein the value document substrate is formed by a printed or unprinted cotton paper, characterized in that the first and/or second feature substance is sprayed onto the moist paper web during papermaking.
21. The production method according to at least one of claims 18 to 20, characterized in that a third feature substance is incorporated into the value document substrate.
22. A method for checking or processing a value document according to any of claims 1 to 17, wherein the authenticity of the value document is checked and a value recognition of the document carried out by using at least one characteristic property of the first and/or second feature substance for checking the authenticity of the value document, and the coding formed by the first and/or second feature substance for the value recognition of the value document.
23. The method according to claim 22, characterized in that at least one characteristic property of the first feature substance is used for checking the authenticity of the value document, and the coding formed by the first marking substance for the value recognition of the value document, by a user of a first user group.
24. The method according to claim 22 or 23, characterized in at least one characteristic property of the second feature substance is used for checking the authenticity of the value document, and the coding formed by the second feature substance for the value recognition of the value document, by a user of a second user group.

25. The method according to claim 22 or 23, characterized in that at least one characteristic property of the first and/or third feature substance is used for checking the authenticity of the value document, and the coding formed by the first feature substance is used for the value recognition of the value document, if the user belongs to the first user group, and at least one characteristic property of the second feature substance is used for checking the authenticity of the value document, and the coding formed by the second feature substance is used for the value recognition of the value document, if the user belongs to the second user group.
26. The method according to at least one of claims 22 to 25, characterized in that the first feature substance is a luminescent substance, and for the authenticity check or value recognition by a user of the first user group, the first feature substance is irradiated with radiation from its excitation range, the emission is determined at at least one wavelength from the emission range of the first feature substance, and the check of authenticity and/or the value recognition is carried out on the basis of the determined emission.
27. The method according to at least one of claims 22 to 26, characterized in that the second feature substance is a luminescent substance, for the authenticity check or value recognition by a user of the second user group the second feature substance is irradiated with radiation from its excitation range, the emission is determined at at least one wavelength from the emission range of the second feature substance, and the check of authenticity and/or the value recognition is carried out on the basis of the determined emission.
28. The method according to claim 26 or 27, characterized in that the first and/or second feature substance is irradiated with visible and/or infrared radiation, and the emission of the irradiated feature substance is determined in the infrared spectral range.
29. The method according to at least one of claims 26 to 28, characterized in that the irradiation is performed with a light-emitting diode or laser diode.